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EXAMINER	
JOSEPH, DENNIS P	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/527,241	BOLDIN, ALEXANDER	
	Examiner	Art Unit	
	DENNIS P. JOSEPH	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 September 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25 and 27-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-25 and 27-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *08 March 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is responsive to arguments filed for application No. 10/527,241 on September 28, 2010. Claims 1-25 and 27-30 are pending and have been examined.

Allowable Subject Matter

2. **Claim 25** objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections – 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. **Claims 1-13, 24 and 27-30 are** rejected under 35 U.S.C. 103(a) as being unpatentable over Adler (6,256,015 B1)

Adler teaches in Claim 1:

A mouse for a computer system, said mouse capable of entering commands into a computer based on the location of a cursor which can be placed on a computer screen, when moving said mouse across a working surface, and being actuatable by a user to generate a signal to said computer **(Figure 7 shows the mouse, Column 3, Lines 18-29 describe how the mouse is used to send signals to position the cursor. Respectfully, cursor control using a mouse is well known in the art)**, said mouse comprising:

a casing having a bottom part resting on the working surface and an upper part **(Figure 7 shows the mouse with a casing with lower and upper parts)**, said casing longitudinally extending from a front end to a rear end and having transversely spaced sides, which are spaced so that said casing is positioned between distal phalanxes of a user's ring and little fingers **(Figure 7 shows the mouse from a front end to a rear end and Figure 6 shows the transversely spaced sides. Note the casing similarities between Figure 6 and Applicant's Figure 2)**, and a distal phalanx of a user's thumb, when a user's lower palm, user's ring and little fingertips, and a side of the distal phalanx of the user's thumb are resting on the working surface without gripping said mouse at a naturally relaxed curled fingers and hand position **(The user may place their fingers in a variety of positions. A standard one is with some of the fingers resting on the surface to provide stability to the mouse)**;

a primary button disposed at an upper front portion of said casing so as to be actuated by

a user's index finger **(It is well known that the primary button (left click) is actuated by the user's index finger)**, said primary button having an upper surface, which is angled to the front end of said casing **(Figures 1 and 7 show the angled structure to the front end of the mouse. Column 1, Lines 63-67 disclose the apertures 44/144 are positioned over corresponding buttons which can be clicked. The primary can be for the left click part, like or 46L)**; and

a primary fingertip receptacle at least partially extending upwardly from said angled upper surface of said primary button and forming a mould around a user's index fingertip, when placed on said angled upper surface of said primary button slightly bent **(Figures 1 and 6 show the apertures which the finger can be placed into to depress the primary button, in the case, for the left click part. Figure 1 shows the groove for forming a mould around the fingertip a little better, such as the longitudinal depressions 46L and 46R),**

said primary button being actuated by a force applied tangential to said angled upper surface of said primary button by said index fingertip, when stroking by said index fingertip said angled upper surface of said primary button in a combined down-forward motion against said moulded contact surface. **(Column 1, Lines 63-67 disclose the apertures 44/144 are positioned over a corresponding button which can be clicked. The finger is in a bent position along 46L and 46R and when it moves to depress the buttons, the finger is further bent, at a tangential angle. Respectfully, down-forward is a broad term and seeing Adler's Figure 1 and disclosure in Column 3, Lines 31-36, it is clear that the cover is meant to be taper downward and forward over the front end, facilitating hand control in those same directions. Applicant's own disclosure in [0015] notes that stroking is similar to stretching, so the terms are admitted to be within reasonable interpretation of each other)**; but

Adler does not explicitly teach "said mould being tapered upwardly from said angled upper surface of said button at a height, which provides a moulded contact surface with said user's index fingertip which allows the user to move securely said mouse in a forward or backward direction without actuating said primary button by said index fingertip, when moving said index fingertip forward or backward against said moulded contact surface by stretching or bending said index finger in order to effect vertical movement of a pointer on a computer screen in up- or downward direction, respectively, said primary fingertip receptacle enabling a user to effect horizontal movement of a pointer on a computer screen without the use of hand or arm movement of the user when turning said casing around its axis in said receptacle, when pushing by a thumb or a little finger of the user against a respective contact area on a respective side of said casing, when operating said mouse," and that the primary button can be actuated without "actuating mouse movement."

However, Figures 1 and 16 show the apertures which allow movement of the mouse, such as the in the vertical direction since the fingers are placed into the grooves. Furthermore, these figures show the longitudinal depressions 46L and 46R/146L and 146R, which allow the finger to be placed therein to contact the apertures 44/144 and these can also be used for movement without the use of the hand or arm and can be done just by moving the two fingers in the grooves. As for the height, the figures show the protrusion into the finger pads, obviously indicating there is a height as can be seen in Figure 1. Looking at this figure further, the fingertips, which are placed inside the apertures 44, can move the mouse in direction by applying a force, inside the groove

area, and in generally a parallel direction to the surface on which the mouse is placed on and this includes moving it in a forward or backward direction.

It is at least obvious to one of ordinary skill in the art that the mouse could be moved by just placing the fingers through the apertures, providing the user with a sense of grip. These figures have the same angling structure as Applicant's as well. Regardless, one of skill would realize that movement could be actuated, or is at least, possible given Adler's structure. It is important to note that if the structure is substantially the same, then the ability to actuate the two, is obvious, if not inherent, with regards to it actually being able to be done.

Therefore, it would be obvious to one of ordinary skill in the art at the time of the invention to actuate the mouse by positioning the fingers onto the finger pads with the motivation that Adler is seeking to design an ergonomic mouse with a good level of comfort and easy actuation of the mouse by the user.

Adler teaches in Claim 2:

The mouse of claim 1 further comprising:

a secondary button disposed transversely of said primary button at an upper front portion of said casing so as to be actuated by a user's middle finger **(It is well known that the secondary button (right click) is actuated by the user's middle finger)** , said secondary button having an upper surface which is angled to the front end of said casing **(Figures 1 and 7 show the angled structure to the front end of the mouse. Column 1, Lines 63-67 disclose the**

apertures 44/144 are positioned over corresponding buttons which can be clicked. The secondary can be for the right click part, like for 46R);

a secondary fingertip receptacle at least partially extending upwardly from a said angled upper surface of said secondary button and forming a mould around a user's middle fingertip, when placed on said angled upper surface of said secondary button slightly bent **(Figures 1 and 6 show the apertures which the finger can be placed into to depress the primary button, in the case, for the left click part. Figure 1 shows the groove for forming a mould around the fingertip a little better, such as the longitudinal depressions 46L and 46R),**

said secondary button being actuated by a force applied tangential to said angled upper surface of said secondary button by said middle fingertip, when stroking by said middle fingertip said angled upper surface of said secondary button in a combined down-forward motion against said moulded contact surface **(Column 1, Lines 63-67 disclose the apertures 44/144 are positioned over a corresponding button which can be clicked. Respectfully, down-forward is a broad term and seeing Adler's Figure 1 and disclosure in Column 3, Lines 31-36, it is clear that the cover is meant to be taper downward and forward over the front end, facilitating hand control in those same directions. Applicant's own disclosure in [0015] notes that stroking is similar to stretching, so the terms are admitted to be within reasonable interpretation of each other)**; and

a form of a rear part of said casing providing sufficient clearance between an upper surface and a rear surface of said casing, and said user's index and middle fingers being placed in the respective receptacle slightly bent, and a lower palm resting on said working surface, so that said upper surface and said rear surface of said casing do not interfere with said user's index and

middle fingers, when the user manipulates said mouse, said form of said rear part of said casing enabling a user to shift said mouse from a neutral position of said user's index and middle fingers, when placed in said respective receptacle slightly bent, by bending said user's index and middle fingers further into a pocket formed by the user's hand, when a user's lower palm, user's ring and little fingertips, and a side of the distal phalanx of the user's thumb are resting on the working surface without gripping or pinching said mouse at a naturally relaxed curled fingers and hand position, so that said mouse does not interfere with said user's palm plane and said user's lower palm resting on said working surface **(Figures 1 and 7 show the casing providing the angled shape to provide a good ergonomic fit for movement operation without interfering with the user's fingers/lower palm. Furthermore, these figures show a "pocket", the apertures which the fingers go into. Pocket is a broad term as well. As for the location of the various hand parts, this is an intended use of the invention, which is not a patentable distinction, again, not without the sufficient corresponding structure claimed. Please note Adler's Figure 2, for example, and in conjunction with one of ordinary skill in the art would that by simply moving the hand "downward" that the claimed features would be seen)**; but

Adler does not explicitly teach "said mould being tapered upwardly from said angled upper surface of said button at a height, which provides a moulded contact surface with said user's middle fingertip which allows the user to move securely said mouse in a forward or backward direction without actuating said secondary button by said middle fingertip, when moving said middle fingertip forward or backward against said moulded contact surface by stretching or

bending said middle finger in order to effect vertical movement of a pointer on a computer screen in up- or downward direction, respectively, said secondary fingertip receptacle enabling a user to effect horizontal movement of a pointer on a computer screen without the use of hand or arm movement of the user, when turning said casing around its axis in said receptacle, when pushing by a thumb or a little finger of the user against a respective contact area on a respective side of said casing, when operating said mouse," and that the secondary button can be actuated without "actuating mouse movement." Furthermore, he does not explicitly teach of the casing not interfering with the lower palm of the user's hand.

However, Figures 1 and 16 show the apertures which allow movement of the mouse, such as the in the vertical direction since the fingers are placed into the grooves. Furthermore, these figures show the longitudinal depressions 46L and 46R/146L and 146R, which allow the finger to be placed therein to contact the apertures 44/144 and these can also be used for movement without the use of the hand or arm and can be done just by moving the two fingers in the grooves, which includes moving it in a forward or backward direction. As for the height, the figures show the protrusion into the finger pads, obviously indicating there is a height as can be seen in Figure 1. In addition, with regards to the heel of the user's hand not interfering with the casing, this is again something that one of skill would realize is possible and could still result in movement of the mouse.

It is at least obvious to one of ordinary skill in the art that the mouse could be moved by just placing the fingers through the apertures, providing the user with a sense of grip. These figures

have the same angling structure as Applicant's as well. Regardless, one of skill would realize that movement could be actuated, or is at least, possible given Adler's structure. It is important to note that if the structure is substantially the same, then the ability to actuate the two, is obvious, if not inherent, with regards to it actually being able to be done.

Therefore, it would be obvious to one of ordinary skill in the art at the time of the invention to actuate the mouse by positioning the fingers onto the finger pads with the motivation that Adler is seeking to design an ergonomic mouse with a good level of comfort and easy actuation of the mouse by the user.

Adler teaches in Claim 3:

The mouse of claim 2 further comprising a wheel button disposed between the primary receptacle and the secondary receptacle, said wheel button accessible by at least one of the user's finger when a user's index finger and a user's middle finger are placed in the respective receptacle of the primary and secondary buttons. **(Column 3, Lines 28-30 disclose a third actuating button or wheel may be positioned between 20L and 20R)**

Adler teaches in Claim 4:

The mouse of claim 2, wherein the primary and secondary receptacles are located on the primary button and the secondary button **(Column 1, Lines 63-67 disclose the apertures 44/144 are positioned over corresponding buttons which can be clicked. Note in Figures 1 and 6 of the groove that is formed (read as receptacle))**, respectively, so that a gap between

the user's index finger and the user's middle finger being placed in the respective receptacles has a spacing distance, which allows a wheel button to be positioned between them. **(Column 3, Lines 28-30 disclose a third actuating button or wheel may be positioned between 20L and 20R)**

Adler teaches in Claim 5:

The mouse of claim 3, wherein each said receptacle has a front portion and a center of said wheel is disposed rearwardly from the front portions of said receptacles. **(Column 3, Lines 28-30 disclose a third actuating button or wheel may be positioned between 20L and 20R. The specific location of the wheel is a design choice)**

Adler teaches in Claim 6:

The mouse of claim 1, wherein said primary receptacle is formed from a moulded component comprising a pad and a rounded section, which tapers upwardly from the pad and is symmetric about a medial plane. **(Figure 6, Column 5, Lines 53-56, shows the finger pad 166 placed in the receptacle which is in a rounded shape. They are symmetrically placed on cover 10)**

Adler teaches in Claim 7:

The mouse of claim 2, wherein said secondary receptacle is formed from a ~~molded~~ moulded component comprising a pad and a rounded section, which tapers upwardly from the pad and is symmetric about a medial plane. **(Figure 6, Column 5, Lines 53-56, shows the**

finger pad 166 placed in the receptacle which is in a rounded shape. They are symmetrically placed on cover 10)

Adler teaches in Claim 8:

The mouse of claim 4, wherein the user's index and middle fingertips being placed in respective receptacles are elevated from the working surface at a height, which is reduced and defined by an outside diameter of said wheel. **(Figure 1 shows the receptacles at an elevated height from the working surface. Column 3, Lines 28-30 disclose a third actuating button or wheel may be positioned between 20L and 20R)**

Adler teaches in Claim 9:

The mouse of claim 1, wherein the sides of said casing each have a concave shape, which define a user's thumb, and a user's ring and little fingertips pinching areas. **(Column 1, Lines 53-56 disclose the concave lower portion for these fingers, for ergonomic purposes)**

Adler teaches in Claim 10:

The mouse of claim 9, wherein both sides of said casing in a user's thumb and a user's ring fingertip pinching areas are vertical to the working surface over which the mouse moves. **(Figures 1 and 6 show them to substantially vertical to the working surface)**

Adler teaches in Claim 11:

The mouse of claim 9, wherein a user's side of the distal phalanx of the thumb and a user's ring and little fingertips being placed on the respective pinching areas register with the working surface over which the mouse moves when a user manipulates the mouse. **(The user may place their fingers in a variety of positions. A standard one is with some of the fingers resting on the surface to provide stability to the mouse)**

Adler teaches in Claim 12:

The mouse of claim 2, wherein a space exists between the user's palm and an upper surface of the rear part of the casing when the user shifts the mouse by stretching or bending the user's index and middle fingers placed in the respective receptacles. **(Figure 1 shows a space that would exist because of the angled shape of the mouse. This would exist between the palm and the rear part)**

Adler teaches in Claim 13:

The mouse of claim 2, wherein a length of the rear part of the casing measured from the front edge of said primary and secondary receptacles allows a user to shift the mouse from a neutral position of the user's index and middle fingers, when placed in said respective receptacle slightly bent, by bending the user's index and middle fingers further in a pocket formed by the user's hand, when a user's lower palm, user's ring and little fingertips, and a side of the distal phalanx of the user's thumb are resting on the working surface without gripping or pinching said mouse at a naturally relaxed curled fingers and hand position, so that the mouse does not interfere with the user's lower palm resting on said working surface **(Figures 1 and 6 show the**

longitudinal depressions 46L and 46R/146L and 146R, which allow the fingers to be placed therein to contact the apertures 44/144. This allows for movement without the use of the hand or arm and can be done just by moving the two fingers in the grooves. Please see the reasoning applied in Claims 1 and 2 for more details. As for the location of the various hand parts, this is an intended use of the invention, which is not a patentable distinction, again, not without the sufficient corresponding structure claimed. Please note Adler's Figure 2, for example, and in conjunction with one of ordinary skill in the art would that by simply moving the hand "downward" that the claimed features would be seen)

Adler teaches in Claim 24:

The mouse of claim 2, wherein said primary and secondary buttons each are parts of ends of levers, which longitudinally extend from a common plate on which other ends of the levers are firmly fixed. **(The buttons are part of the casing plate and have a structure to allow them to be actuated. Furthermore, Figure 10 shows the actuating lever arm)**

Alder teaches in Claim 27:

The mouse of claim 24, wherein said casing has a cross panel in relation to said sides and said common plane of said caseing is inclined toward said front end relative to said cross panel. **(Figure 1 shows the plate with the buttons therein inclined toward the front end)**

Adler teaches in Claim 28:

The mouse of claim 1 further comprising a mouse sensing system wherein a sensor thereof is located on said bottom part rearwardly from said primary receptacle along a central longitudinal axis of said casing at a distance, which allows the user to effect horizontal cursor movement on a computer screen, when turning said casing around its axis in said primary receptacle, when pushing by the user's thumb or little finger against a respective contact area on a respective side of said casing. **(Figure 7 shows the mouse, Column 3, Lines 18-29 describe how the mouse is used to send signals to position the cursor by actuating the buttons)**

Adler teaches in Claim 29:

A computer mouse for a computer system, said mouse being capable of entering commands into a computer based on the location of a c ursor which can be placed on a computer screen, when moving said mouse across a working surface, wherein said mouse has a casing resting on said working surface, said casing having at least one button disposed at an upper front portion thereof so as to be actuated by a user's finger to generate a signal to said computer **(Figure 7 shows the mouse, Column 3, Lines 18-29 describe how the mouse is used to send signals to position the cursor. Respectfully, cursor control using a mouse is well known in the art)**, said mouse comprising:

a moulded structure mounted to an angled upper surface of said button, wherein said moulded structure at least partially extends upwardly from said angled upper surface of said button and forms a mould around a user's fingertip, when placed on said angled upper surface of said button slightly, and which provides a moulded contact surface with said user's fingertip **(Figure 1 shows the cover 10 on top of the mouse to provide an angled surface as shown.**

Figures 1 and 6 show the apertures which the finger can be placed into to depress the primary button, in the case, for the left click part. Figure 1 shows the groove for forming a mould around the fingertip a little better, such as the longitudinal depressions 46L and 46R), which allows the user to effect vertical movement of a pointer on a computer screen in both up- and downward directions when pushing by said finger against said moulded contact surface, said button being actuated by a force applied tangential to said angled upper surface of said button by said fingertip, when stroking by said index fingertip said angled upper surface of said button in a combined down-forward motion against said moulded contact surface. **(Column 1, Lines 63-67 disclose the apertures 44/144 are positioned over a corresponding button which can be clicked. The finger is in a bent position along 46L and 46R and when it moves to depress the buttons, the finger is further bent, at a tangential angle. Respectfully, down-forward is a broad term and seeing Adler's Figure 1 and disclosure in Column 3, Lines 31-36, it is clear that the cover is meant to be taper downward and forward over the front end, facilitating hand control in those same directions. Applicant's own disclosure in [0015] notes that stroking is similar to stretching, so the terms are admitted to be within reasonable interpretation of each other)**; but

Adler does not explicitly teach "said mould being tapered upwardly from said angled upper surface of said button at a height, which provides a moulded contact surface with the user's index fingertip which allows the user to move securely said mouse in a forward or backward direction without actuating said button by said index fingertip, when moving said index fingertip forward or backward against said moulded contact surface by stretching or bending said finger in order to

effect vertical movement of a pointer on a computer screen in up- or downward direction, respectively, said moulded structure enabling a user to effect horizontal movement of a pointer on a computer screen without the use of hand or arm movement of the user, when turning said casing around its axis in said mould, when pushing by a thumb or a little finger of the user against a respective contact area on a respective side of said casing, when operating said mouse."

However, Figures 1 and 16 show the apertures which allow movement of the mouse, such as the in the vertical direction since the fingers are placed into the grooves. Furthermore, these figures show the longitudinal depressions 46L and 46R/146L and 146R, which allow the finger to be placed therein to contact the apertures 44/144 and these can also be used for movement without the use of the hand or arm and can be done just by moving the two fingers in the grooves, in both a forward or backward direction. As for the height, the figures show the protrusion into the finger pads, obviously indicating there is a height as can be seen in Figure 1. Looking at this figure further, the fingertips, which are placed inside the apertures 44, can move the mouse in direction by applying a force, inside the groove area, and in generally a parallel direction to the surface on which the mouse is placed on.

It is at least obvious to one of ordinary skill in the art that the mouse could be moved by just placing the fingers through the apertures, providing the user with a sense of grip. These figures have the same angling structure as Applicant's as well. Regardless, one of skill would realize that movement could be actuated, or is at least, possible given Adler's structure. It is important to

note that if the structure is substantially the same, then the ability to actuate the two, is obvious, if not inherent, with regards to it actually being able to be done.

Therefore, it would be obvious to one of ordinary skill in the art at the time of the invention to actuate the mouse by positioning the fingers onto the finger pads with the motivation that Adler is seeking to design an ergonomic mouse with a good level of comfort and easy actuation of the mouse by the user.

Adler teaches in Claim 30:

The mouse of claim 29, wherein said casing has two buttons disposed transversely of each other at an upper front portion of said casing so as to be actuated by a user's index or middle finger **(Figures 1 and 6 show 46L and 46R on the front portion of the casing for the fingers to fit into)**, said mouse further comprising:

a moulded structure mounted to an angled upper surface of each button, wherein one moulded structure at least partially extends upwardly from an angled upper surface of a primary button and forms a mould around a user's index fingertip, when placed on said angled upper surface of said primary button slightly bent **(Figures 1 and 6 show the apertures which the finger can be placed into to depress the primary button, in the case, for the left click part. Figure 1 shows the groove for forming a mould around the fingertip a little better, such as the longitudinal depressions 46L and 46R)**, which provides a sufficient moulded contact surface with said user's index fingertip when placed on said angled upper surface of said button slightly bent and a second moulded structure at least partially extends upwardly from an angled

upper surface of a secondary button and forms a mould around a user's middle fingertip, when placed on said angled upper surface of said secondary button slightly bent **(Figures 1 and 6 show the apertures which the finger can be placed into to depress the primary button, in the case, for the left click part. Figure 1 shows the groove for forming a mould around the fingertip a little better, such as the longitudinal depressions 46L and 46R)**, said buttons each being actuatable by a force applied tangential to said angled upper surface of said button by one of said fingertip when stroking by said respective fingertip said respective angled upper surface of said respective button in a combined down-forward motion against said respective moulded contact surface. **(Column 1, Lines 63-67 disclose the apertures 44/144 are positioned over a corresponding button which can be clicked. The finger is in a bent position along 46L and 46R and when it moves to depress the buttons, the finger is further bent, at a tangential angle. Respectfully, down-forward is a broad term and seeing Adler's Figure 1 and disclosure in Column 3, Lines 31-36, it is clear that the cover is meant to be taper downward and forward over the front end, facilitating hand control in those same directions. Applicant's own disclosure in [0015] notes that stroking is similar to stretching, so the terms are admitted to be within reasonable interpretation of each other)**; but

Adler does not explicitly teach "said mould being tapered upwardly from said angled upper surface of said button at a height," "actuating said buttons on moulded contact surface by a force applied generally parallel to said working surface by said index or middle fingertip when stretching or bending said index or middle finger against said respective moulded contact surface," "which provides a moulded contact surface with a user's middle fingertip, said moulded

contact surfaces each allowing the user to move securely said mouse in a forward or backward direction without actuating said buttons each by said index or middle fingertip, when moving said index or middle fingertip forward or backward against said respective moulded contact surface by stretching or bending said index or middle finger in order to effect vertical movement of a pointer on a computer screen in up- or downward direction, respectively, when pushing by said finger against one of said moulded contact surfaces, said moulded structure enabling a user to effect horizontal movement of a pointer on a computer screen without the use of hand or arm movement of the user, when turning said casing around its axis in said mould, when pushing by user's thumb or little finger against a respective contact area on a respective side of said casing, when operating said mouse," and that the button can be actuated without "actuating mouse movement."

However, Figures 1 and 16 show the apertures which allow movement of the mouse, such as the in the vertical direction since the fingers are placed into the grooves. Furthermore, these figures show the longitudinal depressions 46L and 46R/146L and 146R, which allow the finger to be placed therein to contact the apertures 44/144 and these can also be used for movement without the use of the hand or arm and can be done just by moving the two fingers in the grooves. As for the height, the figures show the protrusion into the finger pads, obviously indicating there is a height as can be seen in Figure 1. Looking at this figure further, the fingertips, which are placed inside the apertures 44, can move the mouse in direction by applying a force, inside the groove area, and in generally a parallel direction to the surface on which the mouse is placed on, which includes in a forward or backward direction.

It is at least obvious to one of ordinary skill in the art that the mouse could be moved by just placing the fingers through the apertures, providing the user with a sense of grip. These figures have the same angling structure as Applicant's as well. Regardless, one of skill would realize that movement could be actuated, or is at least, possible given Adler's structure. It is important to note that if the structure is substantially the same, then the ability to actuate the two, is obvious, if not inherent, with regards to it actually being able to be done.

Therefore, it would be obvious to one of ordinary skill in the art at the time of the invention to actuate the mouse by positioning the fingers onto the finger pads with the motivation that Adler is seeking to design an ergonomic mouse with a good level of comfort and easy actuation of the mouse by the user.

5. **Claims 14-23** rejected under 35 U.S.C. 103(a) as being unpatentable over Adler (6,256,015 B1) in view of Smith (6,348,912 B1)

As per Claim 14:

Adler does not explicitly teach that for the mouse, "at least one additional button having a user's index finger contact area and disposed rearwardly from said primary receptacle so as to be capable of being actuated by bending the user's index finger positioned in said primary receptacle and simultaneous pinching the mouse between a user's thumb and a user's ring and/or little fingertips."

However, in the same field of endeavor, mice, Smith teaches "Provided adjacent to and behind the buttons 14, 16 are a pair of supplemental buttons 18, 20." **(Column 2, Line 9, Figure 1 shows the supplemental buttons 18 and 20)**

Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to integrate the use of the supplemental buttons as taught by Smith on the receptacles of Adler's mouse with the motivation that "The supplemental buttons 18, 20 are provided to allow ease of use of the mouse 10 by operators having small hands, such as children or people of slight stature." The user's fingers bend in order to actuate the supplemental buttons.

As per Claim 15:

The mouse of claim 14, wherein a contact portion of the primary receptacle and the index finger contact area of the additional button together form a contact shape that conforms to the shape of the distal phalanx of the user's index finger. **(The combination of Adler and Smith teaches of placing the additional button in a reasonable range of the distal phalanx of the index finger so it can actuate in both directions)**

As per Claim 16:

The mouse of claim 15, wherein a surface of the contact portion of the primary receptacle is substantially level with a surface of the index finger contact area of the additional button at all points along a boundary between the primary receptacle and the index finger contact area of the

additional button. **(The combination of Adler and Smith teaches of placing the additional button in a reasonable range of the distal phalanx of the index finger so it can actuate in both directions)**

As per Claim 17:

The mouse of claim 14, wherein an interior portion of the distal phalange of the user's index finger contacts both a front portion of said primary receptacle and a portion of the contact area of the additional button when the user's index fingertip is positioned in said primary receptacle. **(The combination of Adler and Smith teaches of placing the additional button in a reasonable range of the distal phalanx of the index finger so it can actuate in both directions)**

As per Claim 18:

The mouse of claim 14, wherein said additional button is actuated by bending the index finger and simultaneously pinching the sides of the mouse between the user's thumb and the user's ring and/or little fingertips. **(The combination of Adler and Smith teaches of placing the additional button in a reasonable range of the distal phalanx of the index finger so it can actuate in both directions. In order to actuate the additional button, the finger would be bent inward)**

As per claim 19:

Adler does not explicitly teach that for the mouse, "a second additional button having a middle finger contact area and disposed rearwardly from said secondary receptacle so as to be capable of being actuated by bending the user's middle finger positioned in said secondary receptacle and simultaneous pinching the mouse between a user's thumb and a user's ring and/or little fingertips.

However, in the same field of endeavor, mice, Smith teaches "Provided adjacent to and behind the buttons 14, 16 are a pair of supplemental buttons 18, 20." **(Column 2, Line 9, Figure 1 shows the supplemental buttons 18 and 20)**

Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to integrate the use of the supplemental buttons as taught by Smith on the receptacles of Adler's mouse with the motivation that "The supplemental buttons 18, 20 are provided to allow ease of use of the mouse 10 by operators having small hands, such as children or people of slight stature." The user's fingers bend in order to actuate the supplemental buttons.

As per Claim 20:

The mouse of claim 19, wherein a contact portion of the secondary receptacle and the middle finger contact area of the second additional button together form a contact shape that conforms to the shape of the distal phalanx of the user's middle finger. **(The combination of Adler and Smith teaches of placing the additional button in a reasonable range of the distal phalanx of the index finger so it can actuate in both directions)**

Adler teaches in Claim 21:

The mouse of claim 20, wherein a surface of the contact portion of the secondary receptacle is level with a surface of the middle finger contact area of the second additional button at all points along a boundary between the secondary receptacle and the middle finger contact area of the second additional button. **(The combination of Adler and Smith teaches of placing the additional button in a reasonable range of the distal phalanx of the index finger so it can actuate in both directions)**

Adler teaches in Claim 22:

The mouse of claim 19, wherein an interior portion of the distal phalange of the user's middle finger contacts both a front portion of said secondary receptacle and a portion of the contact area of the second additional button when the user's middle fingertip is positioned in said secondary receptacle. **(The combination of Adler and Smith teaches of placing the additional button in a reasonable range of the distal phalanx of the index finger so it can actuate in both directions)**

As per Claim 23:

The mouse of claim 19, wherein said second additional button is actuated by bending the middle finger and simultaneously pinching the sides of the mouse between the user's thumb and a user's ring and/or little fingertips. **(The combination of Adler and Smith teaches of placing the additional button in a reasonable range of the distal phalanx of the index finger so it**

can actuate in both directions. In order to actuate the additional button, the finger would be bent inward)

Response to Arguments

6. Applicant's arguments considered, but are respectfully not persuasive.

Applicant argues on Page 16 of the Remarks that examiner does not see the patentable difference between a mould and a cover. It seems to examiner that Applicant does not argue how they are different, but rather that they are applied differently (Pages 16-17). For example, Applicant alleges that Adler attaches the cover to the mouse and this will not cause an actuation of the button through a force applied to the casing. Examiner does not see how this is plausible given the cover of Adler is not intended to interfere and prevent the buttons from being manipulated; this would be counter-intuitive in this setting since operation of the mouse is restricted. It is respectfully clear that the cover of Adler would still allow for actuation of the mouse and its buttons, in its down-forward motion (commonly done for most mice to activate the buttons).

On Page 17, Applicant argues that Adler does not teach, suggest, or motivate direct contact for the fingertip with the aperture 44. However, as shown in Figure 1 (and also the general concept is shown in Figure 2) that the fingers are designed to fit into the apertures for actuating of the button as well as for movement of the mouse body itself. It is clear that this is being done with the fingertip, given the aperture has been designed for the fingertip to fit in this area.

As for Applicant's arguments about the paradox, examiner can indeed actuate a mouse button by gently stroking (gently is a broad limitation in terms that a person could apply differing amounts of force and still consider it gentle) with a tangential movement to the surface of a button. To emphasize, and in light of Adler, which shows a curved surface (like a conventional mouse, especially with regards to the button being sloped downward), a tangential force (reading this as the mathematical term, which is one point along a curved surface) can be applied by touching and using a down-forward action at this tangential point, and as a result, the button can be actuated. This force, in examiner's opinion, is a gentle one, as claimed.

As for page 19, with respect to the cited law and reasonable expectation of success, this is more with regards to combinations of references and relevant case law, including KSR, and is meant to note if combinations of arts would lead to an obvious and reasonable likelihood of success. This situation is a little different because, first, there is no combination of references. Second, the modifications being made to Adler are not only minor ones, but they are obvious ones, so part of the burden of reasonable success is mitigated by this. Furthermore, parts of the 103 section are not just obviousness-type statements, but examiner is simply noting limitations which are obviously taught in Adler, one what one of ordinary skill in the art would find obvious. It is obvious that in light of these statements that there is a reasonable expectation of success. Furthermore, as noted above with the paradox argument, examiner is able to execute the claim limitations by using a reasonable degree of force, demonstrating success.

With regards to the arguments on Pages 19-21, Applicant argues that examiner has not met the burden to establish a prima facie case. However, examiner strongly feels that the position was articulated and the differences between the claimed invention and Adler were not only

outlined, but resolved as well. From the various responses, it seems Applicant is taking issue with examiner's interpretation. However, this does not mean the differences were not articulated and resolved. The rejection for the independent claims is clear, as to which limitations are being taught and which ones (unmapped) are being resolved by an obviousness-type statement.

On Pages 22-28, Applicant provides a figure to help the arguments of alleged differences. Examiner has agreed all along that while there are structural differences between Adler and the present invention, these differences have not been claimed well enough. In addition to these differences, there are also differences in interpretations that examiner and Applicant are taking. Examiner feels Applicant is not giving weight to examiner's interpretation. As long as it is a valid and reasonable interpretation, a reference can still be applied. Applicant provides a figure which he feels interprets Adler's invention and examiner prefers to use of Adler's figures himself, which have been noted several times in each rejection. Please see Adler's Figure 1, for example, it is clear that the fingertip can be moved tangentially in the aperture to move the mouse and to apply a gentle force in a down forward motion to actuate the button. This aperture, which the finger is in, provides the resistance, to allow for the movement to occur. On that point actually, movement could still be actuated, as well as button actuation, without the resistive endpoint of aperture, simply by moving in the down forward direction. This again goes back to Applicant's broad limitation of "gentle." Also, please note that Adler's cover/mouse tapers downwardly in the same general way that the present invention's does. Claim amendments to distinguish the differences, if any, between these two, have not been enough to make it patentably distinct. Furthermore, as for actuating the button or movement of the mouse (more

arguments on Page 22 with the figure), this was discussed above, so the same reasoning is applied here as well.

Applicant is advised to better claim the structure of the present invention. Also, several of the arguments for Claim 1 are actually not found in Claim 29 and respectfully, that claim is much broader in the sense of what Claim 1 is trying to claim.

Examiner notes that no claim amendments have been made in this regard and hopes the angular differences will be claimed in better detail.

Conclusions

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DENNIS P. JOSEPH whose telephone number is (571)270-1459. The examiner can normally be reached on Monday-Friday, 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on 571-272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DJ

/Amr Awad/
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